

**Abstract**

The present invention provides a photoreactive reagent that binds specifically to  $\text{Ca}^{2+}$ -binding proteins, links to them covalently after photo-activation, and labels them. The novel reagent enables the characterization, purification, inhibition and screening of  $\text{Ca}^{2+}$ -binding proteins, as well as the preparation of a new affinity chromatography matrix and a new protein biosensor. The invention also relates to the use of the reagent in inhibiting apoptosis and necrosis and in diagnosing a disorder associated with a defect in the function of a  $\text{Ca}^{2+}$ -binding protein, and in the preparation of a medicament for treating such disorders.